DOCUMENT RESUME

ED 438 022 PS 027 919

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TITLE The Effective Early Learning Project: The Quality of Adult Engagement in Early Childhood Settings in the UK.
INSTITUTION University Coll. Worcester (England). Centre for Research in Early Childhood Education.
PUB DATE 1999-09-00
NOTE 19p.; Paper presented at the Annual EECERA (European Early Childhood Education Research Association) Conference (9th, Helsinki, Finland, September 1-4, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Caregiver Child Relationship; *Child Caregivers; Comparative Analysis; Day Care; Early Childhood Education; Educational Quality; Foreign Countries; *Instructional Improvement; *Interaction; Preschool Education; *Preschool Teachers; Program Evaluation; *Teacher Student Relationship
IDENTIFIERS Adult Child Relationship; Engagement Style; *Relationship Quality; United Kingdom

ABSTRACT

Based on the view that the quality of adult educative interactions with young children is critical in determining the effectiveness of educational provision and in improving early childhood settings, this paper examines the quality of adult engagement experienced by 3- and 4-year-olds in 9 types of early education and care settings from the private, voluntary, and state-funded sectors in the United Kingdom (UK). Evidence was gathered from observations undertaken as part of the Effective Early Learning (EEL) Project, an international research and development initiative in its fifth year of operation which aims to evaluate and improve the quality of early learning in a wide range of education and care settings in the UK, The Netherlands, and Portugal. The Child Involvement Scale and the Adult Engagement Scale were used to measure the effectiveness of the learning and teaching process. The findings demonstrated that adult sensitivity to children is a basic precondition for educative interactions to occur. Stimulation occurs once a level of sensitivity and responsiveness between adults and children has been established. Autonomy is the most challenging aspect of effective educative interactions. Practitioners in all settings displayed high sensitivity during educative interactions. Practitioners in all settings showed relatively low levels of autonomy during educative interactions. State-funded settings showed higher levels of sensitivity, stimulation, and autonomy than voluntary sector settings. Practitioners showed increased sensitivity, stimulation, and autonomy following the implementation of the EEL improvement process, with less well-qualified staff making the greatest progress. (Contains 10 references.) (KB)

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THE EFFECTIVE EARLY LEARNING PROJECT:

THE QUALITY OF ADULT ENGAGEMENT IN EARLY CHILDHOOD SETTINGS IN THE UK

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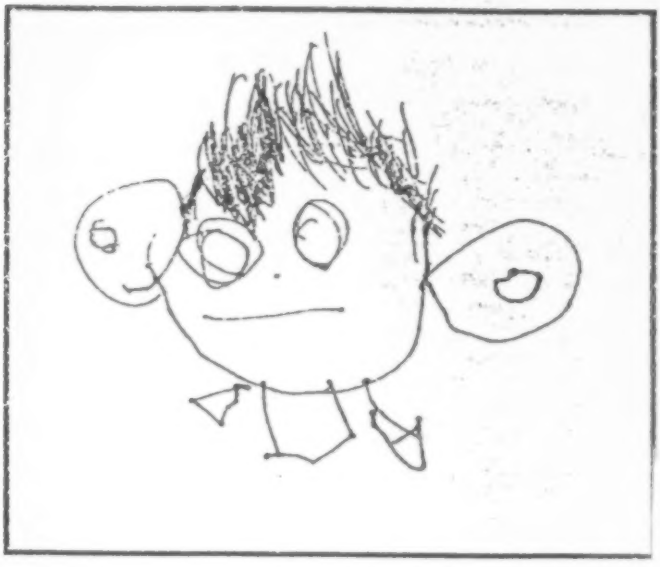
PAPER PRESENTED AT 9TH EECERA CONFERENCE:
HELSINKI, FINLAND. 1ST - 4TH SEPTEMEBER 1999



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THE EFFECTIVE EARLY LEARNING PROJECT: THE QUALITY OF ADULT ENGAGEMENT IN EARLY CHILDHOOD SETTINGS IN THE UK

Professor Christine Pascal and Dr Tony Bertram

1. INTRODUCTION

This paper provides emerging evidence on the quality of 'adult engagement' experienced by three and four year old children in a range of early education and care settings in the UK. The evidence was gathered and analysed from observations undertaken as part of the Effective Early Learning (EEL) Project. An assessment of the quality of adult educative interactions forms a central part of the EEL Project evaluative methodology. This key process variable in children's learning is viewed as critical in determing the effectiveness of educational provision and in informing the improvement process in early childhood settings. As such, the results of the adult practitioner observations provide illuminative evidence of the quality of young children's learning experiences. These findings have a particular relevance given the current debate about the quality of teaching and learning in early childhood settings in the UK. It also provides interesting data for a comparative analysis of the UK results and those in Portugal and The Netherlands.

2. WHAT IS THE EFFECTIVE EARLY LEARNING PROJECT?

The EEL Project (Pascal and Bertram 1997), is an international research and development initiative which aims to evaluate and improve the quality of early learning in a wide range of education and care settings throughout the UK, The Netherlands and Portugal (Pascal et al 1997, 1998). The work of the Project has been largely funded by a partnership between The Esmée Fairbairn Charitable Trust, University College Worcester and local authority providers of education and care. The Project is now in its fifth year of operation.

The EEL Project arose out of the growing recognition that the early years of a child's life are the most critical learning years and will have a long term effect on subsequent achievement and progress (Sylva and Wiltshire 1993, Ball 1994, Schweinhart and Weikart 1997). It also followed the growing awareness that many education and care contexts were not providing the

quality early learning experiences that research has shown are essential to long term success (Audit Commission 1996, OFSTED, 1998). The inadequacy of early learning experiences for many groups of young children growing up across the UK was felt to be a major contributor to their later lack of achievement within the school system and beyond (Ball 1994). The Project therefore aimed to develop a cost effective and efficient strategy for enhancing the quality of early learning experiences for young children in education and care settings from the private, voluntary and public sectors.

The Effective Early Learning Research Project began work in May 1993 and grew out of the urgent need for procedures to facilitate quality evaluation and improvement in the diverse range of settings in which under fives are being educated in the UK. It also responded to the lack of a substantial empirical data base on the quality and effectiveness of early learning offered in these settings. In its early stages the research focused particularly on provision for 3 and 4 year olds, as these children are currently in a wider range of provision than any other age group, but its methods and principles are applicable to teaching and learning at any age. The Project is operating throughout the UK and is being carried out by a team of practitioner researchers, directed by Professor Christine Pascal and Dr Tony Bertram, based at the Centre for Research in Early Childhood at Worcester College of Higher Education in the UK.

The key aims of the Project are:

1. To develop a cost-effective strategy to evaluate and improve the quality and effectiveness of early learning available to young children in a wide range of education and care settings across England, Wales, Scotland and Northern Ireland.

2. To evaluate and compare rigorously and systematically the quality of early learning provided in the diverse range of early childhood education and care settings which characterise provision in the UK.

The Project provides a clear and targeted strategy for change and improvement which builds upon the existing range of provision for young children and attempts to extend the skills and expertise of all those who work with young children. It brings together education and care

provision, and includes those in the voluntary, public and private sectors. It centres round the development and application of an innovative, cost effective and manageable set of 'Quality Evaluation and Improvement' procedures which may be used for training, institutional development, monitoring and review in all early childhood settings. The development of quantitative and qualitative instruments to evaluate and compare the quality of provision in different settings is also a key feature of the Project. In short, it has developed, trialled extensively, and disseminated, a manageable and practicable system of 'externally validated evaluation and improvement' which may be used in all centre based provision for young children with an educational commitment.

The Project has at its heart two interlinked, and complementary elements; that of **research and development.** A main thrust of the Project's work is to **develop** and improve the quality and effectiveness of young children's learning. This operates through the implementation of a process of externally validated self-evaluation, which leads directly to action planning and improvement. This process of evaluation is providing a wealth of detailed qualitative and quantitative data from early childhood settings across the UK. Data on such things as training, staff ratios, curriculum, facilities, teaching styles, interactions, daily programmes, planning and assessment procedures, equal opportunities, home/school partnership and quality control procedures have been collected. This allows a comparative assessment to be made of different kinds of provision, and has also validated a set of **research** instruments and methods for quality monitoring and review of early childhood services. It is anticipated that the research analysis will be published later on this year.

The links between the research process and practice are clear in this Project. The Project is grounded in practice; the research being informed by, and informing, practitioners. The roles of researcher and practitioner have become interwoven in the process. All the members of the research team are practitioners by training and are able to take on this role within the settings they work. This gives them credibility within the settings and helps to break down some of the distancing and mystique which sometimes surrounds "research". Practitioners too have become participant researchers in their own settings. This ensures that the knowledge generated by the Project has a powerful and direct application to the realities of life in these early childhood settings.

3. WHO IS INVOLVED IN THE EEL PROJECT?

The Effective Early Learning Project has evolved through a number of phases.

Phase 1, from 1993-1994, was a 'Developmental' period, during which members of the EEL Team worked intensively for twelve months in 13 different education and care settings, with 52 practitioners, and 390 children and families. The aim was to work in partnership with practitioners and parents to create a manageable system of quality evaluation and improvement.

Phase 2, from 1994-1995, was a period of 'Consolidation and Data Gathering', during which the EEL procedures were trialled and data gathered in 200+ different education and care settings from 9 local authorities, by 800+ practitioners, and 6,000+ children and families. The aim was to train practitioners within each of the participating settings, to work with external advisers, who would support them through the EEL process of 'Quality Evaluation and Improvement'. Data for the national research element of the Project was also collected by the trained practitioners, and validated by the external advisers.

Phase 3, from 1995-1996, was a period of 'Dissemination and Data Gathering', during which the EEL procedures were further disseminated to 500+ different education and care settings from 22 local authorities, by 2,300 practitioners and 15,000+ children and families. The aim was to continue a national training programme for practitioners from participating settings, to work with a developing group of trained external advisers, to implement the EEL 'Quality Evaluation and Improvement' process across the UK. Data was also gathered by this larger cohort to complete the evidential base for the Project research strategy.

Phase 4, from 1996 on, set in motion an ongoing period of 'Dissemination and Data Analysis", during which the EEL 'Quality Evaluation and Improvement' procedures will be widely disseminated throughout the UK and beyond, through a national programme of accredited training. Currently over 50 local authorities are committed to this programme. Data from Phases 2, 3 and 4 are undergoing analysis to provide a detailed and comprehensive portrait of the quality of early learning provision for 3 and 4 year olds in the UK, and it is data from these Phases that are reported in this paper.

The whole life of the EEL Project has been, and continues to be, developmental and collaborative. From the onset, we worked in partnership with practitioners, and during the last five years this partnership has grown and evolved, with each of the partners extending their role in the process. In particular, the practitioners in later phases of the Project have taken over responsibility for most of the evaluation and improvement process, benefiting from the support and validation of an EEL External Adviser at key points. This 'groundedness' provides the EEL procedures with validity, credibility and strength. The experience of the last four years have shown that 'Quality Evaluation and Improvement' is a process well within the grasp of all those who work with young children. Those we have worked with have embraced the rigorous and critical procedures with professionalism and dedication, and an over riding commitment to improving the quality of their work with young children.

4. EVALUATION METHODOLOGY

4.1 The Evaluation and Improvement Process

Building on the above principles of action, quality is evaluated using the EEL framework by taking the participants through a systematic and rigorous four stage process of "Evaluation and Improvement".

Stage 1: Evaluation - during which researchers and participants work together to document and evaluate the quality of early learning within the setting.

Stage 2: Action Planning - during which participants meet together to identify priorities for action and to generate an action plan to implement this.

Stage 3: Improvement - during which the action plan to improve the quality of provision is implemented.

Stage 4: Reflection - during which participants are encouraged to reflect upon the Evaluation and Development process and to review the impact of the action plan in the light of experience.

4.1.1 The Evaluation Stage:

In the first phase of Evaluation, the team of practitioners within the setting work together with an EEL External Adviser, parents and children to scrutinise the quality of their provision. The quality of practice in relation to 10 dimensions of quality are carefully documented and

evaluated using a number of research methods in which the Project participants are trained. These include detailed observations of children and adults, interviews of parents, colleagues and children, documentary analysis and a number of questionnaires. One of the key and innovatory features of this Project is that it allows a detailed, rigorous quantitative and qualitative assessment to be made of the quality of educational provision across a wide range of different early childhood settings. This process of quality assessment has been enhanced by the utilisation of two key observation techniques which measure the effectiveness of the learning and teaching processes. These two methods are:

-**The Child Involvement Scale**: or Leuven Involvement Scale for Young Children LISYC (Laevers 1996), which measures the level of involvement (deep level learning) of the children in the activities offered

- **The Adult Engagement Scale**: which measures the qualities of effective teaching demonstrated by the adult.

The social psychological underpinning of these techniques and their methodology are detailed by Laevers (1996) and Pascal and Bertram (1997). A short summary of the content and the way we have used the Adult Engagement Scale is outlined below.

The Adult Engagement Scale (Laevers 1994, Bertram 1996, Pascal et al 1998) provides a central part of the quality assessment process. This instrument is also based on a method developed by Laevers' EXE Project called the Adult Style Observation Scehdule (ASOS), but we have modified it for use in the EEL Project. This evaluative instrument provides an assessment measure of the quality of an adult's interactions with a child. The instrument is based on the notion that the style of interactions between the educator and the child is a critical factor in the effectiveness of the learning experience.The instrument identifies three core elements in a teacher's style which shapes the quality of such interactions:

SENSITIVITY: This is the sensitivity of the adult to the feelings and emotional well being of the child and includes elements of sincerity, empathy, responsiveness and affection.

STIMULATION: This is the way in which the adult intervenes in a learning process and the content of such interventions.

AUTONOMY: This is the degree of freedom which the adult gives the child to experiment, make judgments, choose activities and express ideas. It also includes how the adult handles conflict, rules and behavioural issues.

This two quantitative research method provides hard data of the effect of action on the quality of educative interaction (teaching) in each setting, as scores obtained in the Evaluation stage can be compared with scores following the Improvement stage. Interestingly, although we term this data "quantitative" the Scale is an attempt to measure "qualitative" aspects of the teaching and learning process. The results reported in this paper are based on data gained using the Adult Engagement Scale assessments.

5. RESEARCH SAMPLE

The Adult Engagement observations were conducted in nine different types of early childhood education and care settings drawn from 23 local authorities throughout the UK. These settings included:

Private Sector	
Private Day Nurseries	11
Workplace Nurseries	23
Voluntary Sector	
PLA Pre-schools (Playgroups)	42
State Sector	
Primary School Reception Classes	91
Primary School Nursery Classes	77
Nursery Schools	33
Primary School Early Years Units	13
Family Centres	16
Special Schools	17
TOTAL	**323**

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These settings were self selecting settings that had opted into the EEL Project and the staff had all been trained in the EEL evaluation methodologies, including the Adult Engagement Scale. Practitioners within the settings conducted the observations in two rounds, one before the EEL improvement process (15,170 observations) and one after (11,340 observations). These observations were validated internally by the study paractitioners, and then externally by an EEL External Adviser. In addition, a sample of settings (approx 10%) were visited by EEL researchers to carry out a validity check on the reported data.

The settings included in the sample covered the private, voluntary and state funded sectors. It should be noted that our analysis of the EEL contextual data gathered at the same time as these observations reveals the State Sector settings generally have a higher level of qualified staff working within them, including trained graduate teachers. The level of resourcing, facilities and equipment available is also generally better in the State Sector, and very variable within the Voluntary Sector settings. The Adult:Child ratios were also variable across Sectors, with the Private and Voluntary Sectors generally having lower ratios than the State Sector, except in Special Schools.

6. RESULTS OF ADULT ENGAGEMENT ASSESSMENTS

The Adult Engagement data are presented in four parts:

1. Means between Three Engagement Domains
2. Sensitivity Levels
3. Stimulation Levels
4. Autonomy Levels

6.1 Means Between Three Engagement Domains

The adult observational data recorded the levels of Sensitivity, Stimulation and Autonomy displayed by practitioners in their educative interactions with children. A score from 1 to 5 was recorded for each of the three domains in each observation in all settings. When we compare the results from the three domains, taking all settings scores as a whole, we can see a clear hierarchical pattern. Settings in all cases consistently displayed the highest levels in relation to Sensitivity and the lowest levels in relation to Autonomy. This pattern confirms the

hierarchical, developmental pattern of adult interactive skills identified by Bertram (1996) within the UK educational and care provision.

Table 1 Engagement Means

Engagement Domain	Round One	Round Two
Sensitivity	4.37	4.51
Stimulation	3.54	3.79
Autonomy	2.78	3.12

These data demonstrate that:

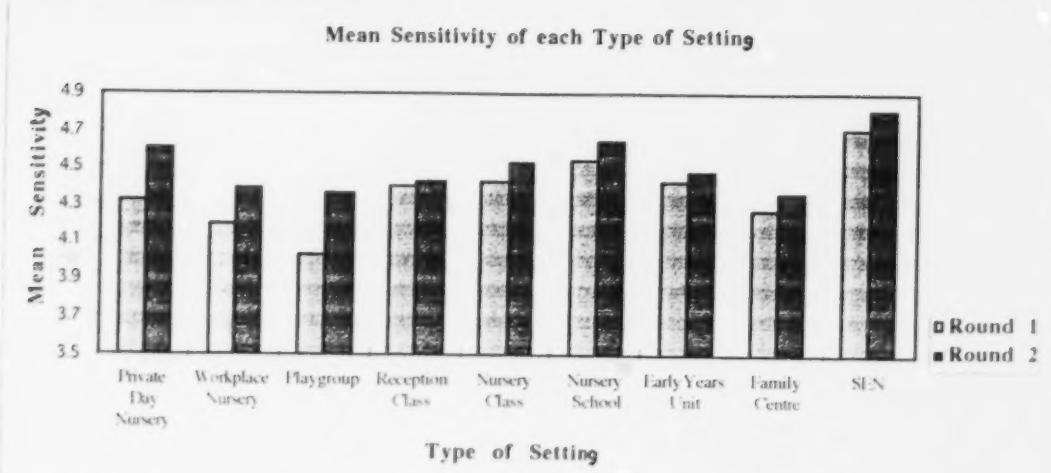
* Sensitivity to children is a basic precondition for educative interactions to take place;
* Stimulation occurs once a level of Sensitivity and responsiveness between adults and children has been established;
* Autonomy is the most challenging aspect of effective educative interactions, and might be viewed as a higher order educative skill.

6.2 Sensitivity Levels

Table 2 Sensitivity Data

Type of Setting	Round One	Round Two
Private Day Nursery	4.33	4.6
Workplace Nursery	4.19	4.38
PLA Pre-school	4.03	4.37
Reception Class	4.39	4.42
Nursery Class	4.42	4.52
Nursery School	4.54	4.65
Early Years Unit	4.42	4.48
Family Centre	4.27	4.36
Special School	4.71	4.81

Figure 2 Sensitivity Data



Data shown in Table 1 and Figure 1 reveal that the mean level of Sensitivity for the settings as a whole is 4.37 in the first round and 4.51 in the second round. These reveal a high level of Sensitivity displayed in adult educative interactions in all study settings. They also show that all settings increased their Sensitivity level following the implementation of the EEL improvement process.

When we compare Sensitivity levels between different types of setting we can see that the Special Schools demonstrate the highest levels (4.71/4.81), followed by the Nursery Schools (4.54/4.65). The lowest levels of Sensitivity are found in PLA Pre-schools (4.03/4.37), followed by Workplace Nurseries (4.19/4.38).

When we compare Sensitivity mean scores for different sectors we see that the State Sector

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demonstrates the highest levels (4.46/4.54) and the Voluntary Sector has the lowest levels (4.03/4.37)

These data demonstrate that:

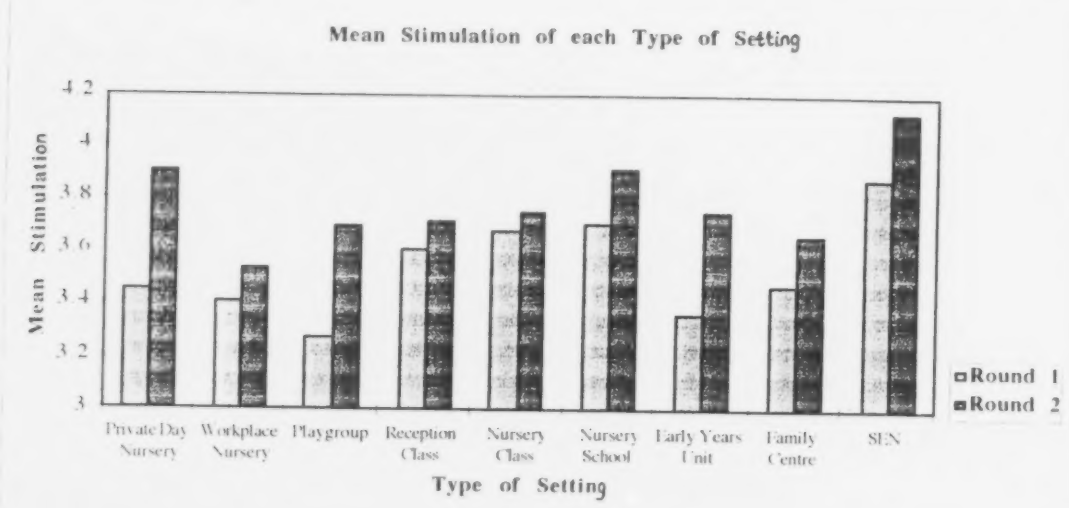
* practitioners in all settings demonstrate high levels of Sensitivity in their educative interactions with children;
* that the EEL evaluation and improvement process increased the Sensitivity Levels of practitioners;
* Sensitivity levels are highest in the State Sector and lowest in the Voluntary Sector;
* Sensitivity Levels are highest in Special Schools and Nursery Schools, and lowest in PLA Pre-schools.

6 .3 Stimulation Levels

Table 3: Stimulation Data

Type Of Setting	Round One	Round Two
Private Day Nursery	3.46	3.91
Workplace Nursery	3.41	3.54
PLA Pre-school	3.27	3.70
Reception Class	3.61	3.72
Nursery Class	3.68	3.76
Nursery School	3.71	3.92
Early Years Unit	3.37	3.76
Family Centre	3.47	3.66
Special School	3.88	4.14

Figure 3: Stimulation Data



Data shown in Table 2 and Figure 2 reveal that the mean level of Stimulation for the settings as a whole is 3.54 in the first round and 3.79 in the second round. These data reveal overall a fairly good level of Stimulation displayed in adult educative interactions in most study settings, although the levels are significantly variable between settings. They also show that all settings increased their Stimulation level following the implementation of the EEL improvement process.

When we compare Stimulation levels between different types of setting we can see that the

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Special Schools demonstrate the highest levels of Stimulation (3.88/4.14), followed by the Nursery Schools (3.71/3.92). The lowest levels of Stimulation are found in PLA Pre-schools in the first round of observations (3.27/3.70), followed by the Workplace Nurseries (3.41), but by the second round of observations the PLA Pre-schools (3.70) were higher than the Workplace Nurseries (3.54) and the Family Centres (3.66).

When we compare Stimulation mean scores for different sectors we see that the State Sector demonstrates the highest levels (3.62/3.83) and the Voluntary Sector has the lowest levels (3.27/3.70)

These data demonstrate that:

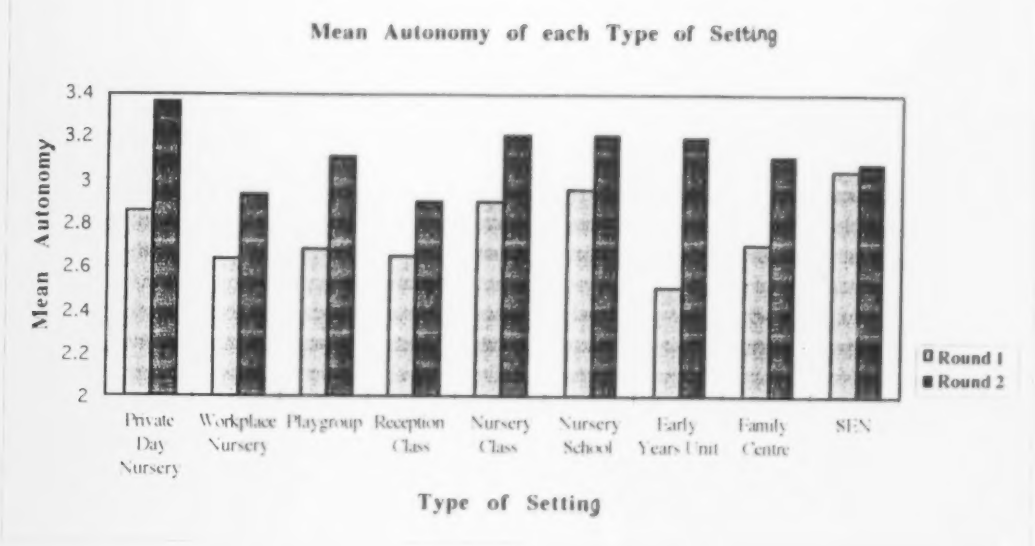
* that Stimulation levels are variable across different types of setting, with some settings displaying very high levels and others significantly lower;
* that the EEL evaluation and improvement process increased the Stimulation Levels of practitioners, and had a particular impact in the Voluntary Sector settings;
* Stimulation levels are highest in the State Sector and lowest in the Voluntary Sector;
* Stimulation Levels are highest in Special Schools and Nursery Schools, and lowest in Workplace Nurseries, Family Centres and PLA Pre-schools.

6.4 Autonomy Levels

Table 4: Autonomy Data

Type Of Setting	Round One	Round Two
Private Day Nursery	2.87	3.37
Workplace Nursery	2.64	2.94
PLA Pre-school	2.69	3.11
Reception Class	2.65	2.90
Nursery Class	2.90	3.22
Nursery School	2.96	3.21
Early Years Unit	2.51	3.20
Family Centre	2.71	3.11
Special School	3.05	3.08

Figure 4: Autonomy Data



Data shown in Table 4 and Figure 4 reveal that the mean level of Autonomy for the settings as a whole is 2.78 in the first round and 3.12 in the second round. These reveal a relatively low level of Autonomy displayed in adult educative interactions in all study settings. They also show that all settings increased their Autonomy level following the implementation of the EEL improvement process.

When we compare Autonomy levels between different types of setting we can see that in the first round of observations the Special Schools demonstrate the highest levels (3.05), followed

by the Nursery Schools (2.96) and the Nursery Classes (2.90). The lowest levels of Autonomy in the first round are found in the Early Years Units (2.51), followed by the Workplace Nurseries (2.64) and the Reception Classes (2.65). Interestingly, in the second round of observations the highest levels of Autonomy are to be found in the Private Day Nurseries (3.37), the Nursery Classes (3.22) and the Nursery Schools (3.21). The lowest levels continue to be found in Reception Classes (2.90) and Workplace Nurseries (2.94).

When we compare Autonomy mean scores for different sectors we see that the State Sector demonstrates the highest levels (2.80) in the first round but the Private Sector had the highest in the second round (3.16). The lowest levels of Autonomy are found in the Voluntary sector in both rounds(2.69/3.11), but the State Sector displayed almost equally low levels in the second round (3.12).

These data demonstrate that:

* practitioners in all settings demonstrate relatively low levels of Autonomy in their educative interactions with children;
* that the EEL evaluation and improvement process increased the Autonomy Levels of practitioners;
* Autonomy Levels are consistently higher in Nursery Schools and Classes and consistently lower in Reception Classes and Workplace Nurseries.
* Autonomy levels are consistently lower in the Voluntary Sector than the State Sector or the Private Sector.

7. DISCUSSION

These results provide an illuminative portrait of the quality of 'adult engagement' in early years settings within the UK. They indicate that the quality of educative interactions is variable within and between sectors of provision. There are a number of key findings which are summarised below:

* there is a hierarchical relationship between the three domains of Sensitivity, Stimulation and Autonomy in educative interactions in all settings, with Sensitivity being consistently high and

Autonomy being consistently low;

* practitioners in all settings display high Sensitivity in their educative interactions with young children;

* the levels of Stimulation are generally higher in the State Sector settings, where more highly qualified staff are employed, particularly in those settings where a trained teacher is employed;

* the levels of Autonomy are low in all Sectors and settings, but are particularly low in PLA Pre-schools and Primary school Reception Classes.

* overall, the Voluntary Sector settings score consistently lower on all domains of 'adult engagement', while the State Sector score consistently higher on all domains.

* All settings respond to training and those settings with less well qualified staff make the greatest progress.

The above results present an interesting portrait of the pattern of adult educative interactions in UK early childhood settings. The key role of training, particularly of teacher training, is indicated in ensuring children are appropriately stimulated in these interactions. The factors inhibiting autonomy in these interactions, particularly within Primary School Reception Classes and PLA Pre-schools will be further explored in the analysis of the EEL contextual data. Assessment of the quality of adult educative interactions in Private, Voluntary and State Sector settings demonstrate that better quality is generally found in State Sector settings.

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